

Amendments To The Claims

This listing of claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

1. (previously presented) Connecting mechanism comprising:
 - one part and another part, the another part being at least partially insertable into the one part, the one part having a cam-operated component which runs on bearings on the one part and is adjustable between a passive and an active position for shifting a first and a second plurality of contact elements between a withdrawal and a contact position, the first plurality of contact elements being separate from the second plurality of contact elements;
 - the first and second plurality of contact elements, when in the contact position, meshing in first and second retaining indentations on the another part;
 - a driving device to adjust the cam-operated component between the active and passive position;
 - the first plurality of contact elements being located at one level in the one part and the second plurality of contact elements being located at a second level in the one part, the contact elements being essentially parallel to the insertion direction of the two parts; and
 - the cam-operated component shifting the contact elements between the withdrawal and contact positions located at each level.
2. (previously presented) Connecting mechanism according to claim 1, characterized in that the one and another parts are tubular.
3. (previously presented) Connecting mechanism according to claim 1, characterized in that the mechanism is arranged in the interior of the one part, whereby the another part can be inserted, with at least one end, into a longitudinal bore hole of the one part.

4. (previously presented) Connecting mechanism according to claim 1, characterized in that the cam-operated component presents at least one cam ring, rotatably running on bearings, with sliding cams on an inner surface of the ring.

5. (previously presented) Connecting mechanism according to claim 1, characterized in that a cam ring is allocated at each level of contact elements.

6. (previously presented) Connecting mechanism according to claim 1, characterized in that the contact elements run in bearings in a supporting ring and are adjustable between the withdrawal and contact positions.

7. (previously presented) Connecting mechanism according to claim 1, characterized in that a supporting ring is allocated at each level.

8. (previously presented) Connecting mechanism according to claim 1, characterized in that sliding cams are formed on the inner surface of the ring as a link guide.

9. (previously presented) Connecting mechanism for two parts, which are at least partially insertable into one another, with a cam-operated component, which runs on bearings on the one part and is adjustable between a passive and active position for shifting a number of contact elements between a withdrawal and a contact position, whereby the contact elements, when in the contact position, mesh in a retaining indentation on the other part, and with a driving device for the adjustment of the cam-operated component between the active and passive position, characterised in that the contact elements are allocated in two or more levels essentially parallel to the insertion direction of the two parts and the cam-operated component for shifting the contact elements between the withdrawal and contact positions is allocated to each level;

the cam-operated component having at least one cam ring, rotatably running on bearings, with sliding cams on an inner surface of the ring; and

the contact element, with a rotatable locating element that runs on bearings, is in contact with the inner surface of the ring.

10. (currently amended) Connecting mechanism for two parts, which are at least partially insertable into one another, with a cam-operated component, which runs on bearings on the one part and is adjustable between a passive and active position for shifting a number of contact elements between a withdrawal and a contact position, whereby the contact elements, when in the contact position, mesh in a retaining indentation on the other part, and with a driving device for the adjustment of the cam-operated component between the active and passive position, characterised in that the contact elements are allocated in two or more levels essentially parallel to the insertion direction of the two parts and the cam-operated component for shifting the contact elements between the withdrawal and contact positions is allocated to each level; and

a spring biasing force forcing the contact element being forced-in the direction of the withdrawal position.

11. (previously presented) Connecting mechanism according to claim 1, characterized in that the contact elements of different levels present contact positions that are shifted in different amounts, at least radially towards the interior.

12. (previously presented) Connecting mechanism according to claim 1, characterized in that the contact elements of one level present contact positions that are shifted at least in different amounts radially towards the interior.

13. (previously presented) Connecting mechanism for two parts, which are at least partially insertable into one another, with a cam-operated component, which runs on bearings on the one part and is adjustable between a passive and active position for shifting a number of contact elements between a withdrawal and a contact position, whereby the contact elements, when in the contact position, mesh in a retaining indentation on the other part, and with a driving device for the adjustment of the cam-operated component between the active and passive position, characterised in that the contact elements are allocated in two or more levels essentially parallel to the insertion direction of the two parts and the cam-operated component for shifting the contact elements between the withdrawal and contact positions is allocated to each level;

the contact elements of different levels being arranged offset to one another in the circumferential direction.

14. (previously presented) Connecting mechanism according to claim 13, characterized in that the cam-operated component includes a cam ring for each level of contact elements and pivot bearings are arranged between adjacent cam rings.

15. (previously presented) Connecting mechanism for two parts, which are at least partially insertable into one another, with a cam-operated component, which runs on bearings on the one part and is adjustable between a passive and active position for shifting a number of contact elements between a withdrawal and a contact position, whereby the contact elements, when in the contact position, mesh in a retaining indentation on the other part, and with a driving device for the adjustment of the cam-operated component between the active and passive position, characterised in that the contact elements are allocated in two or more levels essentially parallel to the insertion direction of the two parts and the cam-operated component for shifting the contact elements between the withdrawal and contact positions is allocated to each level;

the cam-operated component having a cam ring with a guide slot having first and second ends, the guide slot running in the direction of rotation, and the ends determining the passive and active positions of the cam ring.

16. (previously presented) Connecting mechanism according to claim 15, characterized in that the cam ring presents a gearing at least along one part of its outside circumference, the gearing meshing with a pinion that can be rotated by the driving device.

17. (previously presented) Connecting mechanism according to claim 16, further including a plurality of cam rings with each cam ring being driven separately.

18. (previously presented) Connecting mechanism according to claim 16, characterized in that the driving device presents at least one electric motor, whose driven shaft has a driving connection with the pinion.

19. (previously presented) Connecting mechanism according to claim 18, characterized in that a plurality of electric motors are allocated to the driven shaft.

20. (previously presented) Connecting mechanism according to claim 18, characterized in that two or more driven shafts with one or more electric motors are arranged in the circumferential direction of the cam ring at a distance from one another.

21. (previously presented) Connecting mechanism according to claim 18, characterized in that each of a plurality of pinions have a driving connection with one of a plurality of driven shafts that are meshed with a cam ring.

22. (previously presented) Connecting mechanism according to claim 21, characterized in that a step-down gear unit is arranged between the driven shaft and pinion.

23. (previously presented) Connecting mechanism according to claim 1, characterized in that the contact element presents a concave curved inner surface and/or is formed essentially wedge-shaped running in the direction radially inwards relative to a supporting ring.

24. (previously presented) Connecting mechanism for two parts, which are at least partially insertable into one another, with a cam-operated component, which runs on bearings on the one part and is adjustable between a passive and active position for shifting a number of contact elements between a withdrawal and a contact position, whereby the contact elements, when in the contact position, mesh in a retaining indentation on the other part, and with a driving device for the adjustment of the cam-operated component between the active and passive position, characterised in that the contact elements are allocated in two or more levels essentially parallel to the insertion direction of the two parts and the cam-operated component for shifting the contact elements between the withdrawal and contact positions is allocated to each level;

the one part having at least one retainer bore hole for the driving device in its wall and for the insertion end of the other part.

25. (previously presented) Connecting mechanism for two parts, which are at least partially insertable into one another, with a cam-operated component, which runs on bearings on the one part and is adjustable between a passive and active position for shifting a number of contact

elements between a withdrawal and a contact position, whereby the contact elements, when in the contact position, mesh in a retaining indentation on the other part, and with a driving device for the adjustment of the cam-operated component between the active and passive position, characterised in that the contact elements are allocated in two or more levels essentially parallel to the insertion direction of the two parts and the cam-operated component for shifting the contact elements between the withdrawal and contact positions is allocated to each level;

a wall on an insertion end of the one part has an interior ring clearance zone, in which an insertion sleeve is attached in a way that it can be detached, which is formed at least for the rotatable support of a plurality of cam rings and for the support of a plurality of supporting rings.

26. (previously presented) Connecting mechanism for two parts, which are at least partially insertable into one another, with a cam-operated component, which runs on bearings on the one part and is adjustable between a passive and active position for shifting a number of contact elements between a withdrawal and a contact position, whereby the contact elements, when in the contact position, mesh in a retaining indentation on the other part, and with a driving device for the adjustment of the cam-operated component between the active and passive position, characterised in that the contact elements are allocated in two or more levels essentially parallel to the insertion direction of the two parts and the cam-operated component for shifting the contact elements between the withdrawal and contact positions is allocated to each level; and

the retaining indentation in the other part being formed as a snap ring groove.

27. (previously presented) Connecting mechanism according to claim 1, characterized in that the retaining indentation in the another part is enlarged radially.

28. (previously presented) Connecting mechanism according to claim 1, characterized in that the contact element is essentially formed so that it is claw-shaped or latch-shaped.

29. (previously presented) Connecting mechanism for two parts, which are at least partially insertable into one another, with a cam-operated component, which runs on bearings on the one part and is adjustable between a passive and active position for shifting a number of contact elements between a withdrawal and a contact position, whereby the contact elements, when in the

contact position, mesh in a retaining indentation on the other part, and with a driving device for the adjustment of the cam-operated component between the active and passive position, characterised in that the contact elements are allocated in two or more levels essentially parallel to the insertion direction of the two parts and the cam-operated component for shifting the contact elements between the withdrawal and contact positions is allocated to each level;

wherein the driving device includes two pivot bearings arranged on each side of a bearing shaft that has a driving connection with a driven shaft for a pinion in the circumferential direction of a cam ring of the cam-operated component.

30. (previously presented) Connecting mechanism according to claim 29, characterized in that the position of the driven shaft and/or bearing shaft and/or pinion and/or cam ring and/or contact element can be registered by means of a position sensor.

31. (currently amended) Connecting mechanism for two parts, which are at least partially insertable into one another, with a cam-operated component, which runs on bearings on the one part and is adjustable between a passive and active position for shifting a number of contact elements between a withdrawal and a contact position, whereby the contact elements, when in the contact position, mesh in a retaining indentation on the other part, and with a driving device for the adjustment of the cam-operated component between the active and passive position, characterised in that the contact elements are allocated in two or more levels essentially parallel to the insertion direction of the two parts and the cam-operated component for shifting the contact elements between the withdrawal and contact positions is allocated to each level;

wherein the driving device includes a plurality of driven shafts mechanically synchronized in their rotational movements.

32. (currently amended) A connector of oilfield members, the connector comprising:
a first member insertable at least partially into a bore of another member, the bore having a height;
the first member having at least first and second annular grooves;
the another member having at least a first and a second plurality of contact elements, the first plurality of contact elements being separate from the second plurality of contact elements;

the first plurality of contact elements being radially movable at a first height in the bore and the second plurality of contact elements being radially movable at a second height in the bore; and

at least one actuation member to move the first plurality of contact elements into the first annular groove and to move the second plurality of contact elements~~members~~ into the second annular groove whereby the first member is held three-dimensionally within the another member.

33. (previously presented) The connector of claim 32 wherein the first and second annular grooves have different diameters.

34. (previously presented) The connector of claim 32 further including stops to limit the actuation of the first and second plurality of contact elements into the first and second annular grooves.

35. (previously presented) The connector of claim 32 wherein the actuation member cams the first and second plurality of contact elements into the first and second annular grooves.

36. (previously presented) The connector of claim 32 further including a drive member to actuate the at least one actuation member.

37. (previously presented) The connector of claim 36 wherein the drive member is housed within the another member.

38. (previously presented) The connector of claim 36 wherein the drive member includes a motor rotating a pinion geared to the actuation member.

39. (previously presented) The connector of claim 38 wherein the actuation member includes at least one cam ring geared to the pinion to rotate with respect to the first and second plurality of contact members.

40. (currently amended) The connector of claim 32 further including a sleeve mounted within the bore of the another member, the first and second plurality of contact elements~~members~~ being movably mounted on the sleeve.